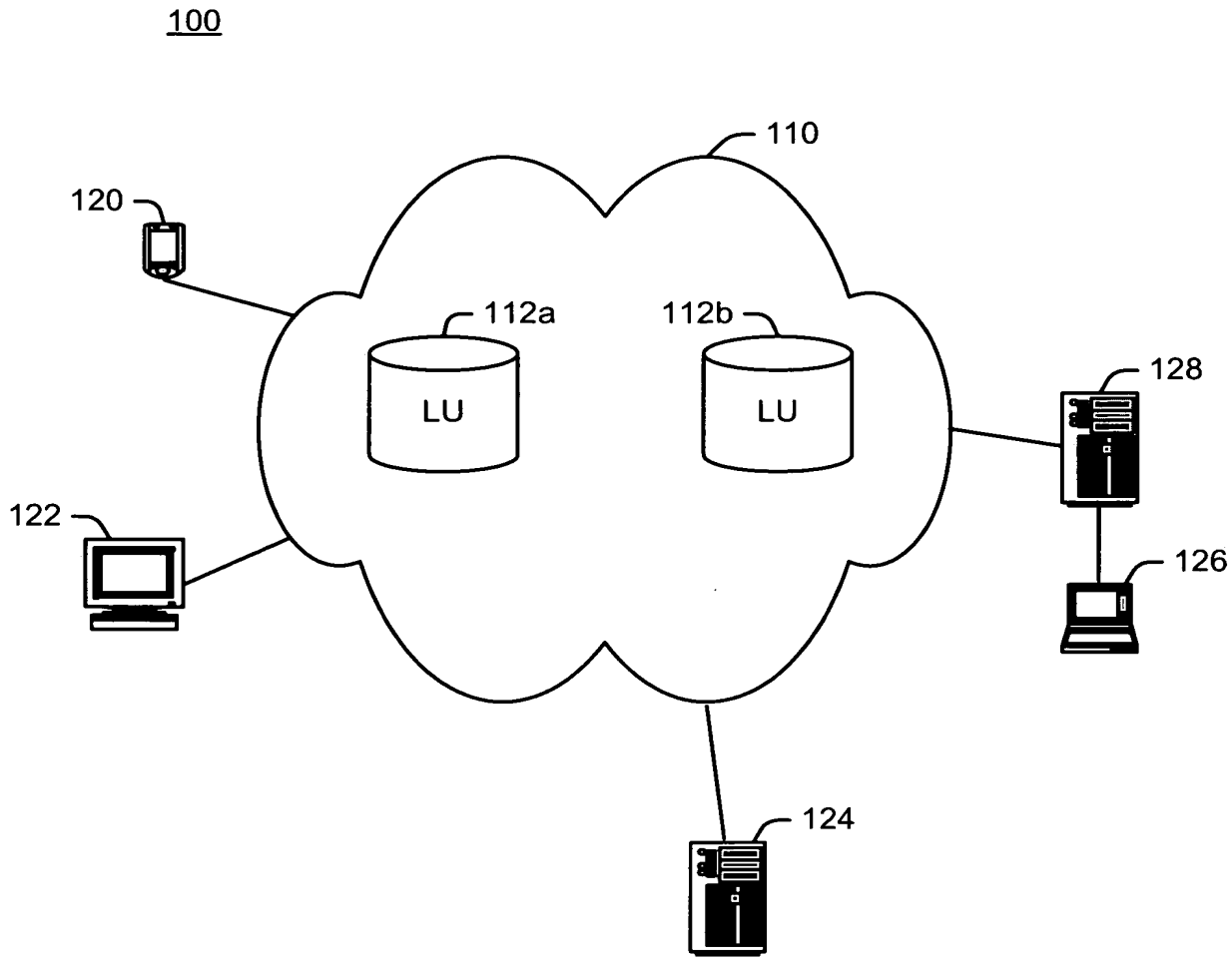

Fig. 1

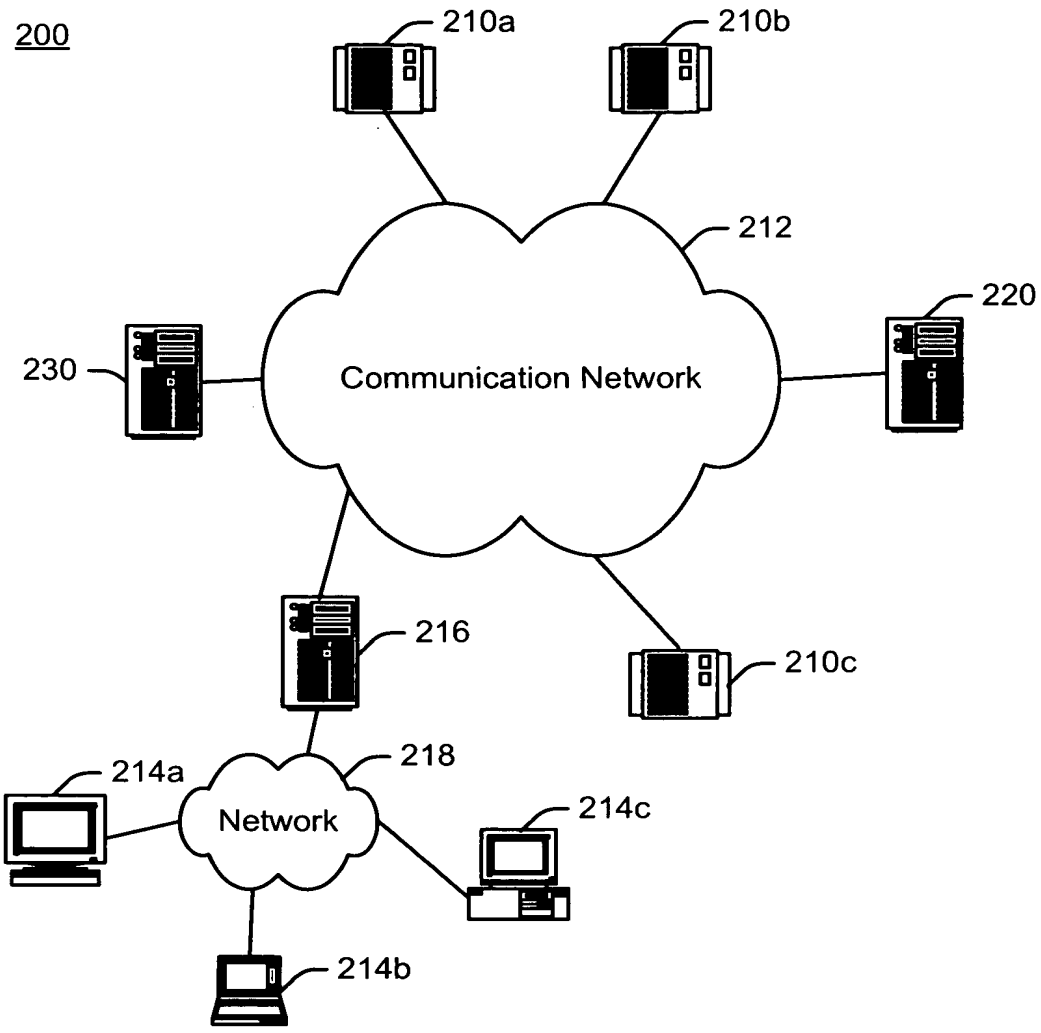
200
210a
210b
212
220
230
Communication Network
216
210c
214a
218
Network
214c
214b

Fig. 2

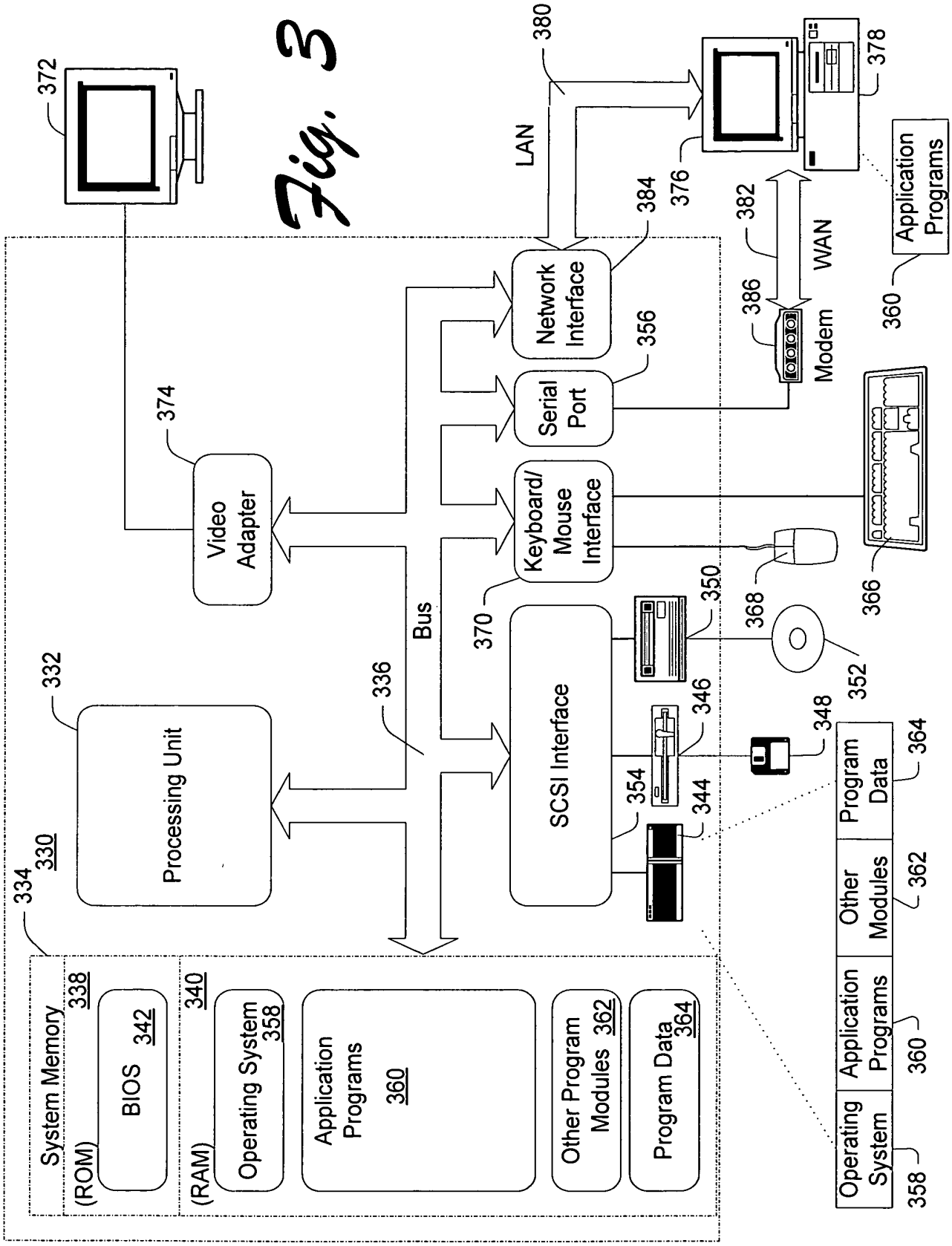
372
380
LAN
378
376
382
384
WAN
386
Modem
Application Programs
360
Network Interface
356
Serial Port
374
Video Adapter
Keyboard/ Mouse Interface
370
Bus
350
368
366
332
336
Processing Unit
SCSI Interface
346
348
352
354
344
334
330
System Memory
338
(ROM)
BIOS 342
340
(RAM)
Operating System 358
Application Programs 360
Other Program Modules 362
Program Data 364
Program Data
364
Other Modules
362
Application Programs
360
Operating System
358

Fig. 3

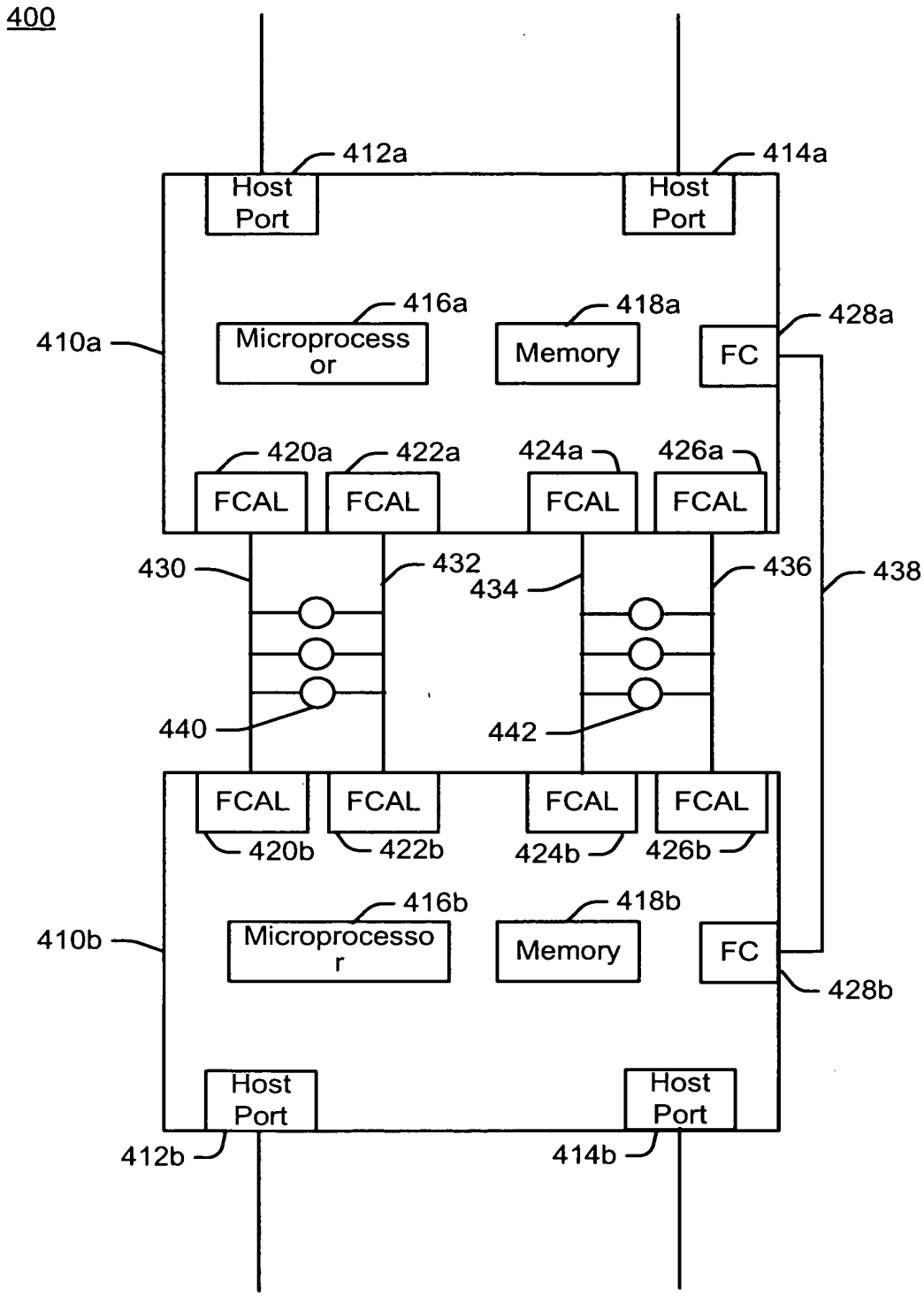
400
412a
Host Port
414a
Host Port
416a
Microprocessor
418a
Memory
428a
FC
410a
420a
FCAL
422a
FCAL
424a
FCAL
426a
FCAL
430
432
434
436
438
440
442
FCAL
420b
FCAL
422b
FCAL
424b
FCAL
426b
416b
Microprocessor
418b
Memory
FC
428b
410b
Host Port
412b
Host Port
414b

Fig. 4

500

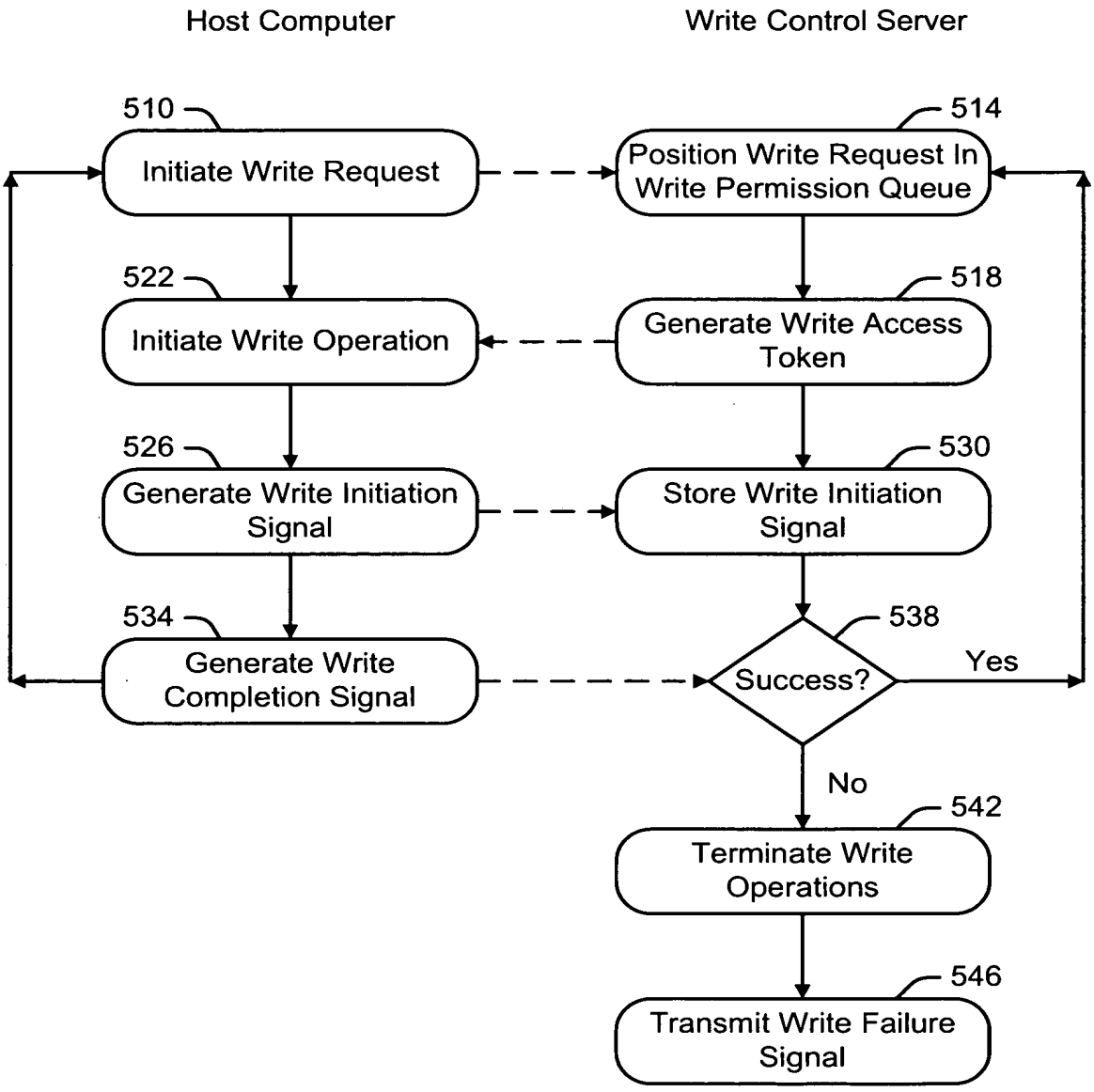
Host Computer
Write Control Server
510
Initiate Write Request
514
Position Write Request In Write Permission Queue
522
Initiate Write Operation
518
Generate Write Access Token
526
Generate Write Initiation Signal
530
Store Write Initiation Signal
534
Generate Write Completion Signal
538
Success?
Yes
No
542
Terminate Write Operations
546
Transmit Write Failure Signal

Fig. 5

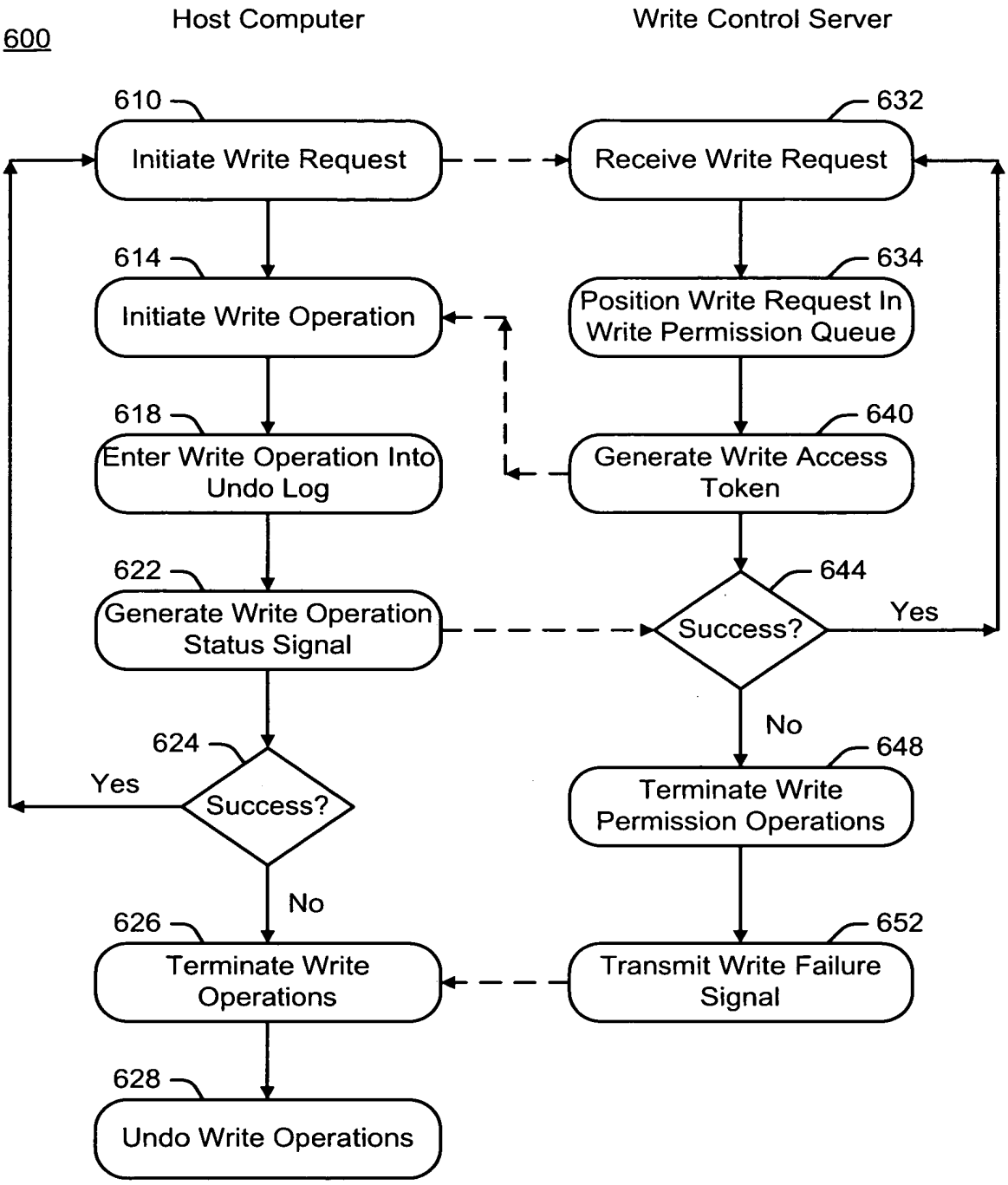
600
Host Computer
Write Control Server
610
Initiate Write Request
632
Receive Write Request
614
Initiate Write Operation
634
Position Write Request In Write Permission Queue
618
Enter Write Operation Into Undo Log
640
Generate Write Access Token
622
Generate Write Operation Status Signal
644
Success?
Yes
No
624
Success?
Yes
No
648
Terminate Write Permission Operations
626
Terminate Write Operations
652
Transmit Write Failure Signal
628
Undo Write Operations

Fig. 6

700

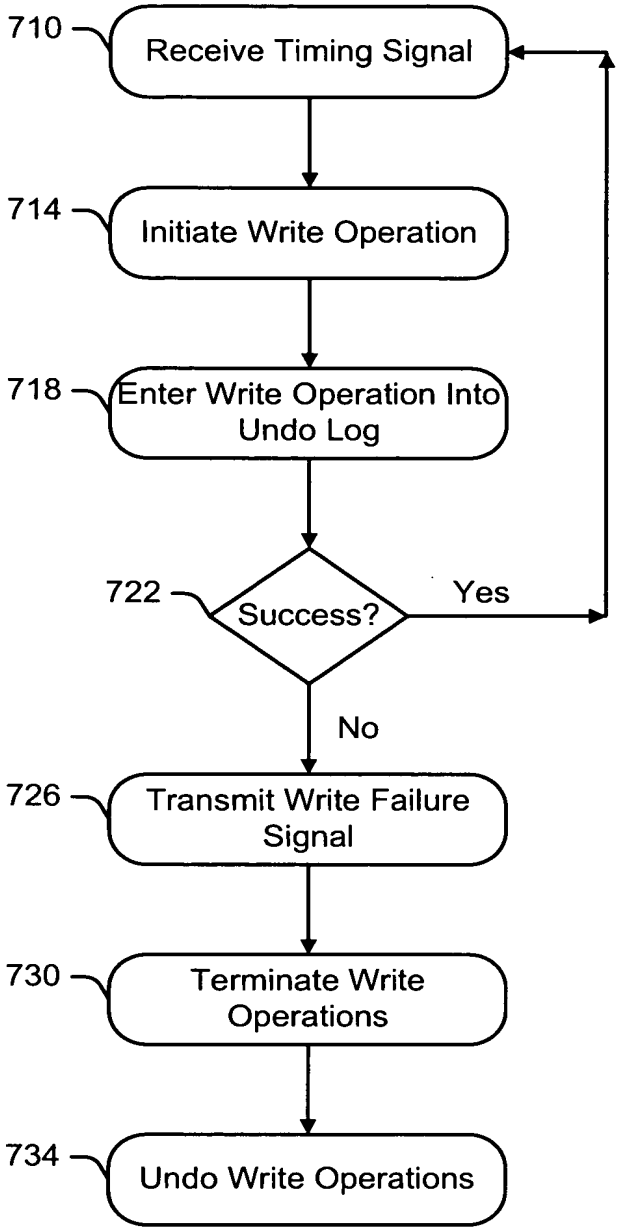
710
Receive Timing Signal
714
Initiate Write Operation
718
Enter Write Operation Into Undo Log
722
Success?
Yes
No
726
Transmit Write Failure Signal
730
Terminate Write Operations
734
Undo Write Operations

Fig. 7